

ABSTRACT OF THE DISCLOSURE

In a wavelength division multiplexing optical transmission system, in order to know an influence amount
5 of a temperature dependency of a dispersion slope, a method
of monitoring a dispersion variation amount in two or more
of wavelength channels is provided. Further, a method of
compensating a wavelength dependency of a temperature
dependency of the dispersion by providing an appropriate
10 dispersion individually to the channels or summarizingly
for all of bandwidths based on the monitored dispersion
variation amounts is provided. According to the present
invention, in the WDM optical transmission system, a
deterioration in a transmission characteristic by
15 influence of a temperature variation of the dispersion
slope can be reduced.